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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/490,882	01/24/2000	Douglas Alexander	14531.27.2.1	7778
22913	7590	01/30/2004		
WORKMAN NYDEGGER (F/K/A WORKMAN NYDEGGER & SEELEY) 60 EAST SOUTH TEMPLE 1000 EAGLE GATE TOWER SALT LAKE CITY, UT 84111				
			EXAMINER SHELTON, BRIAN K	
			ART UNIT 2611	PAPER NUMBER 4
DATE MAILED: 01/30/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/490,882

Applicant(s)

ALEXANDER ET AL.

Examiner

Brian Shelton

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 24 January 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 11-15, 25-28 and 29-31 is/are allowed.
- 6) ☒ Claim(s) 1-6, 9 and 16 is/are rejected.
- 7) ☒ Claim(s) 7-8, 10 and 17-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2. 6) ☐ Other: _____

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-4 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1, 6, and 9 of U.S. Patent No. 6,530,085. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are different definitions of the same subject matter varying in breadth.

For example, note the relationship between application claim 1 and patented claim 9 (dependent on claims 6 and 1):

(a) the claimed "***interconnection system for interconnecting a first electronic device to a second electronic device***" (lines 1-3) of the instant application claim 1 corresponds to the "***consumer electronics device being***

adapted to be connected to the one or more other consumer electronic devices" (lines 1-6) of patented claim 1;

(b) the claimed "***plurality of electrical conductors...second end***" (lines 4-6) of the instant application claim 1 corresponds to the "***plurality of identical, interchangeable connector means...plurality of different cable types***" (lines 7-13) of patented claim 1; and

(c) the claimed "***video connector attached to the first end...usable with either the composite signal format or the S-video format***" (lines 9-13) of the instant application claim 1 corresponds to the "***detachable adapter cable...adapting said detachable cable from an S-video configuration to an RCA configuration***" (lines 1-6) of patented claim 9.

However, the instant application additionally claims one or more audio connectors, each attached to the first end of one of the electrical conductors of the plurality of electrical conductors. Connections between audio/video electronic devices including composite or S-video connections have to include audio connectors to interconnect audio/video devices for the typical advantage of providing audio signals among interconnected audio/video devices.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify patent 6,530,085 to include one or more audio connectors, each attached to the first end of one of the electrical conductors of the plurality of electrical conductors for the typical advantage of providing audio signals among interconnected audio/video devices.

As for application claim 2, the claimed ***"wherein the video connector comprises a male S-video connector for use with the S-video signal format"*** (lines 1-2) is an obvious modification because all consumer electronic devices having S-video capability have female S-video connection receptacles which correspond to the male S-video connector of the electrical conductors utilized in the standard S-video connection.

As for claim 3, the claimed ***"wherein the video connector further includes an adapter...male S-video connector"*** (lines 1-6) of the instant application claim 3 corresponds to ***"a detachable adapter...RCA configuration"*** (lines 1-6) of patent 6,530,085 claim 9.

As for claim 4, left and right audio connectors in a composite audio/video interconnection system are included for the typical advantage of providing stereo audio signals among interconnected audio/video devices (i.e., enhancing the quality of sound delivered by an audio/video system).

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify patent 6,530,085 to include one or more audio connectors comprising a left audio connector and a right audio connector that are capable of transmitting audio signals between the first electronic device and the second electronic device when the interconnection

system is used with composite video format for the typical advantage of providing stereo audio signals among interconnected audio/video devices (i.e., enhancing the quality of sound delivered by an audio/video system).

3. Claim 16 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 19 of U.S. Patent No. 6,169,879. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are different definitions of the same subject matter varying in breadth.

For example, note the relationship between application claim 16 and patented claim 19:

- (a) the claimed "***method for communicating signals between the first electronic device and second electronic device using either a composite signal format of an S-video signal format***" (lines 1-4) of the instant application claim 16 corresponds to the "***method of connecting electronics devices to the central device***" (lines 1-3) of patent 6,169,879 claim 19;
- (b) the claimed "***connecting the first electronic device with the second electronic device...using a particular signal format selected from the composite signal format and the S-video signal format***" (lines 5-10) in the instant application claim 16 corresponds to the "***selecting an electronics device***

compatible with S-video signals or RCA video signals...connecting a cable...at the central device" (lines 4-7) of patent 6,169,879 claim 19;

- (c) the claimed ***"at the first electronics device, determining whether the particular signal format is the composite signal format or the S-video signal format"*** (lines 11-12) of the instant application claim 16 corresponds to ***"determining whether the cable is configured to transmit S-video signals or RCA video signals"*** (lines 8-9) of patent 6,169,879 claim 19; and
- (d) the claimed ***"based on the determination made...using the particular signal format"*** (lines 13-15) of the instant application claim 16 corresponds to ***"if the cable is configured to transmit S-video, then passing S-video...if the cable is configured to transmit RCA video signals, then passing RCA video signals...plurality of identical jacks"*** (lines 10-15) of patent 6,169,879 claim 19.

It would have been obvious to one of ordinary skill in the art to readily recognize that the conflicting claims are different definitions or descriptions of the same subject matter, varying in breadth.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-2 are rejected under 35 U.S.C. 102(e) as being anticipated by Cho.

Regarding claim 1, Cho discloses an interconnection system (video line connection apparatus; see Fig. 2; col. 3, lines 3-53) for interconnecting a first electronic device (one of output devices TV and VCR) to a second electronic device (one of source devices VCR, BS, LDP, and DVD), both electronic devices utilizing audio and video signals, the interconnection system comprising:

- (a) a plurality of electrical conductors for interconnecting the first electronic device (see Fig. 2, disclosing conductors connecting to output jacks **60-63**; col. 3, lines 11-20) and the second electronic device (conductors connecting to input jacks **52-59**; col. 3, lines 3-11), each of the plurality of electrical conductors having a first end and a second end;
- (b) one or more audio connectors, each being attached to the first end of one of the electrical conductors of the plurality of electrical conductors (an audio/video lines connection apparatus inherently discloses one or more audio connectors; see col. 1, lines 5-14); and
- (c) a video connector attached to the first end of each of a subset of the plurality of electrical conductors (see Fig. 2, where output jacks

60-63 comprise a video connector) the video connector being selectively adaptable for use with either a composite signal format or an S-video signal format such that the interconnection system is selectively usable with either the composite signal format or the S-video signal format (col. 5, lines 9-17, disclosing adaptive path connection based upon connection state of input and output devices; see col. 4, lines 6-20, disclosing path selection of S-video and composite inputs and outputs).

As for claim 2, Cho discloses the video connector comprising a male S-video connector for use with the S-video signal format (col. 3, lines 22-26 disclosing S-video input and output connectors. An interconnection system utilizing S-video connectors inherently discloses mating male S-video connectors to female S-video ports).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cho in view of Robbins.

Regarding claim 4, Cho discloses audio connectors for transmitting audio signals between the first electronic device and the second electronic device (as discussed above) but fails to specifically disclose audio connectors comprising a left audio connector and a right audio connector.

Robbins, however, discloses an audio/video interconnection system comprising left and right audio signals (col. 6, lines 63-66; see Fig. 1 at left audio output **68** and right audio output **70**) for the advantage of providing stereo sound reproduction in an audio/video system.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cho to include left and right audio signals, as taught by Robbins, for the advantage of providing stereo sound reproduction in an audio/video system.

As for claim 5, the use of the S-video signal format in an audio/video system (as discussed in claim 1) inherently discloses the use of corresponding audio connectors since the S-video format transmits only video (comprised of chrominance and luminance) signals.

8. Claims 6 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cho in view of Moriyama.

Regarding claim 6, Cho discloses an interconnection system (as discussed above), but fails to disclose a mini-plug attached to both the second

end of said one of the plurality of electrical conductors and the second end of said subset of the plurality of electrical conductors, the mini plug having a plurality of contact points.

However, Moriyama discloses an interconnection system comprising mini-plugs to connect audio/video devices (Fig. 1, cable unit **15**; see col. 3, lines 6-20; see Fig. 2 and col. 3, lines 24-33 disclosing cable unit **15** comprising mini-plugs **15b** selected to connect reception equipment with intermediate equipment) for the advantage of simplifying the interconnection of audio/video devices.

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Cho to include a mini-plug attached to both the second end of one of the plurality of electrical conductors and the second end of each of said subset of the plurality of electrical conductors, the mini plug having a plurality of contact points, as taught by Moryama, for the advantage of simplifying the interconnection of audio/video devices.

The limitation of claim 9 is encompassed by the teachings of Cho in view of Moriyama. Specifically, Cho discloses a video connector comprising a male S-video connector for use with the S-video signal format (col. 3, lines 22-26 disclosing S-video input and output connectors. An interconnection system utilizing S-video connectors inherently discloses mating male S-video connectors to female S-video ports).

Allowable Subject Matter

9. Claims 11-15, 25-28, and 29-31 are allowed.

Claims 11-15 are allowable because the prior art fails to disclose or suggest an interconnection system for connecting first and second devices comprising in combination a plurality of electrical conductors for interconnecting the first and second devices, means for selectively adapting the interconnection system for use with either the composite or S-video signal format, and a mini-plug at a first end of the interconnection system and having a plurality of contact points, wherein the mini plug can be connected to the first electronic device, as recited by the claims.

Claims 25-28 are allowable because the prior art fails to disclose or suggest a system for connecting first and second electronic devices and for transmitting signals between the devices, comprising in combination a mini-plug at a first end of the interconnection system and having a plurality of contact points, wherein the mini plug can be connected to the first electronic device, a plurality of electrical conductors for interconnecting the first and second devices, where each of the conductors have a first and second end, wherein the first end of each of the conductors is connected to one of the contact points of a mini plug,

means for selectively adapting the interconnection system for use with either composite or S-video signal format, and a receptacle that is included in the first electronic device and can couple with the mini plug, as recited by the claims.

Claims 29-31 are allowable because the prior art fails to disclose or suggest a method for transmitting either composite or S-video signals through an interconnection system, comprising combination the steps of coupling a mini plug positioned at a first end of the interconnection system to a first electronic device so as to enable transmission of audio and video signals, and coupling a connector positioned at a second end of the interconnection system to a second device so as to enable transmission of audio and video signals between the interconnection system and the second device, wherein the connector is selectively adaptable to be used to transmit audio and video signals in either a composite or S-video signal format, as recited by the claims.

10. Claims 7-8, 10, and 17-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

11. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

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Signature: _____

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Shelton whose telephone number is (703) 305-8714. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

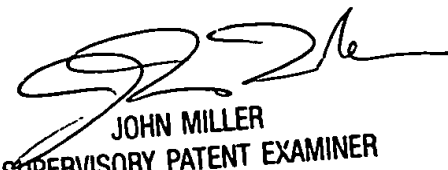
If attempts to reach the examiner by telephone are unsuccessful, the primary examiner, Christopher Grant can be reached on (703) 305-4755. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Brian Shelton
Examiner
Art Unit 2611

BS


CHRIS GRANT
PRIMARY EXAMINER


JOHN MILLER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600